

United States Government

Department of Energy
Bonneville Power Administration

memorandum

DATE: July 18, 2002

REPLY TO
ATTN OF: KEP/Z-992

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS
(DOE/EIS-0285/SA-89) North Bonneville-Troutdale 1&2.

TO: Jim Jellison – TFO/Olympia
Ed Tompkins – TFO/Ross

Proposed Action: Vegetation Management for the North Bonneville-Troutdale Transmission Lines 1 and 2.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to control noxious weeds in the rights-of-ways, along access roads and around tower structures that may impede the operation and maintenance of the subject transmission line. Other tall growing vegetation will be treated as necessary See Section 1.4 of the attached checklist for a complete description of the proposed action.

Analysis: See the attached checklist for the resources present. Applicable findings and mitigation measures are discussed below.

Planning Steps:

1. Identify facility and the vegetation management need.

Work will take place on a 28-mile stretch of the North Bonneville-Troutdale 230kV adjacent transmission lines 1 and 2. Project extends between towers 1/1 and 14/1 having a 300-foot easement width. The ROW is located in Skamania County, Washington in the BPA Olympia Region. Scotch broom and knapweed are the primary vegetation species to be controlled; however other tall growing vegetation may be cut/treated in future cycles

This vegetation management program is designed to provide a 4-5 year maintenance free interval. Future cycles of work will involve spot, foliar treatments or mechanical cutting. Broadcast foliar may occur along roads and around tower sites in non-sensitive areas.

2. Identify surrounding land use and landowners/managers and any mitigation.

The subject corridor traverses residential, rural, agricultural, industrial Forestlands, Washington State DNR lands, USFS Columbia Gorge NSA and State, City and County lands. Landowners along the ROW have been contacted.

3. *Identify natural resources and any mitigation.*

Section 3 of the attached checklist identifies the natural resources present in the area of the proposed work.

Water resources identified include riparian zones and T&E streams. Mitigation measures include selective cutting and herbicide use in addition to the use of buffer zones as described in Sections 3.1 and 3.2 of the attached checklist. These mitigation measures are consistent with the EIS.

The work corridor crosses steep slopes and spanned canyons. Mitigations include selective methods as described in Section 3.7 and 3.8 of the attached checklist. These mitigation measures are consistent with the EIS.

No other natural resource or cultural resource issues were identified.

4. *Determine vegetation control and debris disposal methods.*

Vegetation will be removed using manual or mechanical methods. Herbicide applications include spot, localized and foliar techniques. Noxious weeds will be left standing were treated. The weeds requiring hand cutting will be lopped and scattered. As described in Section 5 of the attached checklist.

5. *Determine revegetation methods, if necessary.*

Established plant communities already exist with grasses prevalent in the ROW, along roads, and around structures. Seeding was determined to be unnecessary at this time.

6. *Determine monitoring needs.*

Follow up inspection will be performed in late summer. Cut stump/basal or foliar treatment of target vegetation will be conducted as needed based on the inspection results. The proposed mixture of herbicides is identified in Section 6.1 of the attached checklist. The herbicide mixture is consistent with the EIS. The line will be patrolled annually thereafter to monitor the effectiveness of the treatment measures.

7. Prepare appropriate environmental documentation.

Findings: This Supplement Analysis finds that 1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; 2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Elaine Stratton

Elaine Stratton
Environmental Protection Specialist

CONCUR: /s/ Thomas C. McKinney

Thomas C. McKinney
NEPA Compliance Officer

DATE: 07/22/2002

Attachment

cc:

L. Croff – KEC-4
T. McKinney – KEC-4
M. Hermeston – KEP-4
J. Meyer – KEP-4
J. Sharpe – KEPR-4
E. Stratton – KEP/Z992
P. Key – LC-7
M. Johnson – TF/DOB-1
D. Kraus – TFO/Olympia
S. Martin – TFO/Olympia
J. Jellison – TFO/Olympia
D. Swanson – TFOP/Ross
Environmental File – KEC-4
Official File – KEP-4 (EQ-14)

Vegetation Management Checklist

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

Describe Right-of-way.

See Handbook — List of Right-of-way Components for checkboxes and the requirements for the components Rights-of-way, Access Roads, Switch Platforms, Danger Trees, and Microwave Beam paths.

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Nbonn-Trout 1&2	28 Miles – each line = 230kV	300 foot wide	No. Bonn Sub to 15/4+400

This entry is primarily for noxious weed control within BPA’s fee-owned row, the Ross District portion of the North Bonn. Sub, along access roads and around structures. On easement rows, only access roads and structures will be treated.

1.2 Describe the vegetation needing management.

See handbook — List of Vegetation Types, Density, Noxious Weeds for checkboxes and requirements.

Noxious Weeds - Scotch broom & knapweed are the primary vegetation species to be controlled within BPA fee-owned row and along access roads & structures on easement property. Contractor will be instructed to treat poison oak around structures. No seeding required as a well established low growing plant community exists within the row.

All tall growing species will be controlled by foliar treatment.

1.3 List measures you will take to help promote low-growing plant communities. If promoting low-growing plants is not appropriate for this project, explain why.

See Handbook — for requirements and checkboxes.

Managing for noxious weeds only and will not affect the existing established low growing plant community.

1.4 Describe overall management scheme/schedule.

See Handbook - Overall Management Scheme/Schedule.

Initial entry – During July & August of 2002, cut and/or treat tall growing species and noxious weeds with herbicides growing within the substation, row, access roads, and structures.

Subsequent entries – See future cycles.

Future cycles - Combine control of noxious weeds with brush contracts every 4-5 years to eliminate additional entries to treat noxious weeds.

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.

See Handbook — Landowners/Managers/Uses for requirements, and List of Landowners/Managers/Uses for a checkbox list.

Existing land uses adjacent to BPA’s fee-owned right-of-way range from commercial timberlands to agricultural to rural residential. Large landowners include WA State Dept. of Natural Resources, Longview Fibre, Columbia Gorge Scenic Area (USFS) and private landowners.

Landowners/Managers/Uses:

Residential

Rural

Agricultural

Industrial Forest lands

Forest Service - USFS Columbia Gorge NSA

State/City/County Lands – WA State Dept. of Natural Resources & Beacon Rock State Park, and Skamania County.

2.2 Describe method for notifying right-of-way landowners and requesting information (i.e., door hanger, letter, phone call, e-mail, and/or meeting). Develop landowner mail list, if appropriate.

See Handbook — Methods for Notification and Requesting Information for requirements.

Methods of Notification and Requesting Information

During planning for vegetation control activities, I have discussed BPA’s noxious weed control methods with DNR Nat. Area Preserve rep – Michelle Zuckenbug - who verbally approved controlling the scotch broom within the row that crossed their lands. Beacon Rock State Park’s ranger indicated they take responsibility for noxious weed control and prefer to continue with this practice. On other DNR lands, only access roads & structures will be treated. A letter will be sent to DNR – Castle Rock office notifying them of this work. BPA is fee owner for the remaining portion of the row.

2.3 List the specific land owner/land use measures — determined from the handbook or through your consultations with the entities — that will be applied.

See handbook — Requirements and Guidance for Various Landowners/Uses for requirements and guidance, also Residential/Commercial, Agricultural, Tribal Reservations, FS-managed lands, BLM –managed lands, Other federal lands, State/ Local Lands.

Span		Landowner/use	Specific measures to be applied
From	To		
2/4+		City of No. Bonn. Water Tank & Pipeline	Hand cutting method only, no herbicides will be applied within 200 feet of facility
100			
3/2+	3/3+	DNR Lands	Treat noxious weeds
100	500		
3/6+	4/3+	Beacon Rock State Park	No treatment – skip area
550	1200		

4/3+ 1200	5/2+ 250	DNR Lands	Treat noxious weeds
6/2+ 100	6/4+ 700	OSU Study Area	No treatment – skip area
7/3	8/5+ 360	DNR & Natural Area Preserve	Treat noxious weeds on access road/structures only.
12/2+ 590	12/4+ 520	DNR lands	Treat noxious weeds.

2.4 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.

See handbook — Landowner Agreements for requirements.

2.5 List any known casual informal use of the right-of-way by non-owner publics. List any constraints or measure’s to take due to the informal use.

See handbook — Casual Informal Use of Right-of-way for requirements.

None known at this time.

2.6 List other potentially affected people, agencies, or tribes (that are not landowners/managers) that need to be notified or coordinated with. Describe method of notification and coordination.

See handbook — Other Potentially Affected Publics for requirements and suggestions.

Yakima Indian Nation – Letter will be sent to Tribal Representatives notifying them of the impending work.

3. IDENTIFY NATURAL RESOURCES

See Handbook — Natural Resources

3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.

See Handbook — Water Resources for requirements for working near water resources including buffer zones.

General requirements:

Leave vegetation intact, where possible.

Any discharge of material (displaced soils, and in certain circumstances, vegetation debris) within a water of the U.S. may be subject to U.S. Army Corps of Engineers regulations under the Clean Water Act.

Do not permit debris from tree falling, cutting, or disposal to fall into or be placed in any watercourse, spring, pond, lake, or reservoir, unless there is approval from the appropriate authorities for stream habitat projects.

For all methods using machinery or vehicles (i.e. chainsaws, trucks, graders) keep the equipment in good operating condition to eliminate oil or fuel spills.

Do not wash equipment or vehicles at a stream.

Span		Waterbody	T&E?	Method	Herbicide	Application Technique	Buffer	Other
From	To							
1/1+ 250	1/1+ 842	Greenleaf Slough	Yes	Hand cut.	Non-to practically non-toxic herbicides. See treatment details.	Spot spray 100-200' away from waters edge.	No herb w/in 100' of waters edge.	
1/3+ 415	1/3+ 485	Perennial Stream-no name creek	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer	35' Both sides. No machinery	
1/5 + 505	1/6	Carpenter Cr. and perennial stream.	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
1/7+ 465	1/7+ 535	Perennial stream	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
2/1+ 175	2/1+ 750	Hamilton Cr.	Yes	Hand cut	Non-to practically non-toxic herbicides. See treatment details.	Spot spray 100-200' away from waters edge.	No herb w/in 100' of waters edge.	
2/1+ 1315	2/1+ 1385	Over flow	No	Hand cut				
2/2+ 385	2/2+ 455	Perennial stream	No	Hand cut	Aquatic Formulations. See treatment details.	S Spot spray to edge, foliar 35'buffer pot spray	35' Both sides. No machinery	
2/4+ 100		Water Tanks	No	Hand cut	No herbicides w/in 200 ft.		200' diameter	
3/1+ 235	3/1+ 305	Perennial stream	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
3/3+ 500	3/3+ 725	Hardy Creek	Yes	Hand cut	Non-to practically non-toxic herbicides. See treatment details.	Spot spray 100-200' away from waters edge.	No herb w/in 100' of waters edge.	Skip this Riparian Zone
3/6 + 100	3/6 +550	Perennial streams	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
5/3+ 200	5/3+ 850	East Fork Woodward Cr.	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	No roads in canyon – skip area.
5/3+ 1930	5/4	West Fork Woodward Cr.	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	No roads in canyon – skip area.

					details.	spray		
6/4+ 700	6/5	Perennial Stream	Yes	Hand cut	Non-to practically non-toxic herbicides. See treatment details.	Spot spray 100-200' away from waters edge.	No herb w/in 100' of waters edge.	
6/6+ 365	6/6+ 435	Perennial Stream	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
7/2	7/2+ 650	Duncan Cr.	Yes	Hand cut	Non-to practically non-toxic herbicides. See treatment details.	Spot spray 100-200' away from waters edge.	No herb w/in 100' of waters edge.	
8/2+ 400	8/2+ 600	Perennial Stream.	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	WA DNR Natural Area
8/4+ 365	8/4+ 435	Perennial streams thru row.	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	WA DNR Natural Area
8/5+50	8/5+ 120	Perennial streams thru row.	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	WA DNR Natural Area
9/5+ 600	9/6	Wetland and spring	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
9/6+ 350	9/6+ 700	Wetland and spring	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
11/1+ 260	11/1+ 715	McClosky Cr.	No	Hand cut	Aquatic Formulations. See treatment zone details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	No roads in canyon – skip area.
11/3	11/4+ 240	Wetland	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
11/4+ 240	11/4+ 900	Washougal River	Yes	Hand cut	Non-to practically non-toxic herbicides. See treatment details.	Spot spray 100-200' away from waters edge.	No herb w/in 100' of waters edge.	No roads in canyon – skip area.
11/4+ 1162	12/1	Perennial Stream	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer pot spray	35' Both sides. No machinery	

					details.	spray		
13/4+ 615	13/4+ 685	Perennial Stream	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	
14/1+ 175	14/2	N. Fork of Washougal R.	Yes	Hand cut	Non-to practically non- toxic herbicides. See treatment details.	Spot spray 100- 200' away from waters edge.	No herb w/in 100' of waters edge.	No roads in canyon – skip area.
14/2	14/3	Perennial Stream	No	Hand cut	Aquatic Formulations. See treatment details.	Spot spray to edge, foliar 35'buffer Spot spray	35' Both sides. No machinery	

3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners maybe able to provide this info if requested).

See Handbook — Herbicide Use Near Irrigation, Wells or Springs for buffers and herbicide restrictions.

Span		Well/irrigation/or spring	Herbicide	Buffer	Other notes/measures
From	To				
2/4+ 100		Water Tank	No herbicides w/in 200' feet.	200'	Tank located off row. Buffer should be easily obtained.
9/5+ 400	9/6	Wetland and spring	Aquatic Formulations. See treatment zone details.	100' Both sides. No machinery w/in zone.	
9/6+ 360	9/6+ 700	Wetland and spring	Aquatic Formulations. See treatment zone details.	100' Both sides. No machinery w/in zone.	

3.3 List below the areas that have Threatened or Endangered Plant or Animal Species and the name of the species, and any special measures that need to be taken due to their presence. Attach any BAs, T&E maps, or letters from US Fish and Wildlife.

See Handbook — T&E Plant or Animal Species for requirements and determining presence.

Span		T&E Species	Method/mitigation or avoidance measures
From	To		
1/1+ 250	1/1+ 842	Anadromous Fish	Maintain buffer of 100' both sides. No herb w/in 100' of waters edge. Spot spray 100-200' away from waters edge w/non to practically non-toxic herbicides.
2/1+ 175	2/1+ 750	Anadromous Fish	Maintain buffer of 100' both sides. No herb w/in 100' of waters edge. Spot spray 100-200' away from waters edge w/non to practically non-toxic herbicides.
3/3+ 500	3/3+ 725	Anadromous Fish	Maintain buffer of 100' both sides. No herb w/in 100' of waters edge. Spot spray 100-200' away from waters edge w/non to practically non-toxic herbicides.

6/4+ 700	6/5	Anadromous Fish	Maintain buffer of 100' both sides. No herb w/in 100' of waters edge. Spot spray 100-200' away from waters edge w/non to practically non-toxic herbicides.
7/2	7/2+ 650	Anadromous Fish	Maintain buffer of 100' both sides. No herb w/in 100' of waters edge. Spot spray 100-200' away from waters edge w/non to practically non-toxic herbicides.
11/4+ 240	11/4+ 900	Anadromous Fish	Maintain buffer of 100' both sides. No herb w/in 100' of waters edge. Spot spray 100-200' away from waters edge w/non to practically non-toxic herbicides.
14/1+ 175	14/2	Anadromous Fish	Maintain buffer of 100' both sides. No herb w/in 100' of waters edge. Spot spray 100-200' away from waters edge w/non to practically non-toxic herbicides.

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.

See Handbook — Protecting Other Species for requirements.

Span		Species	Measures
From	To		
8/2+150	8/6	Sensitive plants & animals w/in the Nat. Area Preserve.	Noxious weeds along access road will be treated. Contractors will be informed about the sensitivity of the area and herbicides will not be sprayed w/in 100 feet of any water source.

3.5 List any visually sensitive areas and the measures to be taken at these areas.

See Handbook — Visual Sensitive Areas for requirements.

None identified.

3.6 List areas with cultural resources and the measures to be taken in those areas.

See Handbook – Cultural Resources for requirements.

None identified.

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.

See Handbook – Steep/Unstable Slopes for requirements.

Tall growing trees and noxious weed treatment will be done by cutting and/or foliar treatment. Much of the weeds are scattered and mixed within the well-established low growing plant community. Very little impact to steep slopes is expected by treating individual plants.

3.8 List areas of spanned canyons and the type of cutting needed.

See Handbook – Spanned Canyons for requirements.

Most spanned canyons are roadless and therefore will require very little treatment. However, noxious weed treatment may be done in spanned canyons if access roads pass through these areas. Very little impact to is expected by treating individual plants.

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — Methods

4.1 List Methods that will be used in areas not previously addressed in steps above.

See Handbook — Manual, Mechanical, Biological, and Herbicides for requirements for each of the methods.

Tall growing species and noxious weed control outside of waterways, sensitive areas, and protected sites will be treated with appropriate herbicide depending on the treatment zone. Most noxious weeds in the row will be foliar treated using a backpack sprayer. Broadcast foliar may occur along roads & towers provided no water or sensitive buffers exist. Contractor will have the option to mow/handout scotch broom and follow-up with herbicide application if desired and cost effective.

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

5.1 Describe the debris disposal methods to be used and any special considerations.

See Handbook — Debris disposal for a checkbox list and requirements.

No slash disposal is planned or needed on this entry. Noxious weeds will be left standing where treated. The weeds that require hand cutting will be lopped & scattered.

5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3).

See Handbook — Reseeding/replanting for requirements.

Well-established low growing plant community already exists with grasses prevalent in the row, along roads, and around structures. No seeding anticipated at this time.

5.3 If not using native seed/plants, describe why.

NA

5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.

NA

6. DETERMINE MONITORING NEEDS

See handbook — Monitoring for requirements.

6.1 Describe the follow-up/monitoring cycle that will be used to evaluate the effectiveness of the vegetation control methods used.

- Right-of-way will be visited during late summer to determine if target vegetation was cut and treated effectively, whether desired results were achieved for riparian as well as non-riparian areas and if mitigation measures were appropriately utilized and effective. ROW mgmt plan will be developed from this review and implemented next cutting cycle.

6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.

None

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — Prepare Appropriate Environmental Documentation for requirements. Also prepare Supplement Analysis — Supplement Analysis — for signature.

7.1 Describe any potential project impacts or project work that are different than those disclosed in the Transmission System Vegetation Management Program EIS. Describe how those differences impact natural resources and if the differences are “substantial”.

None

7.2 Is there a need for additional NEPA documentation (i.e. Forest Service requirement, Record of Decision, supplemental EIS)? If so, attach.

None